

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Applicant: City of Henderson
240 Water Street
PO Box 95050
Henderson, NV 89009-5050

Permit Number: NV0024082

Location: Whitney Mesa Recreation Area
West of Galleria Drive, between Sunset Road and Patrick Lane
Henderson, Clark County, NV
Latitude: 36° 04' 10" N, Longitude: 115° 03' 34" W
Sections 3&4, T21S & 22S, R62E MDB&M

Discharge Outfalls: The water is collected in a system of shallow sumps and trenches and conveyed via gravity and pumps to a sediment settling tank prior to discharge to any of three locations (Outfalls 001, 002 and Outfall 003), and ultimately to the Pittman Wash, downstream of the project areas.

Outfall 001: Whitney Wash outfall just northwest of Rising Star Drive
Latitude: 36° 02' 10" N Longitude: 115° 03' 19" W

Outfall 002: drop inlet at intersection of Galleria Dr. & Plain Sight Dr.
Latitude: 36° 04' 27" N Longitude: 115° 03' 23" W

Outfall 003: drop inlet at intersection of Galleria Dr. & Patrick Lane
Latitude: 36° 04' 41" N Longitude: 115° 03' 32" W

General: The City of Henderson (Permittee) has applied for a new National Pollutant Discharge Elimination System (NPDES) permit, NV0024082, to construct improvements to the Whitney Mesa Recreation Area in Henderson, in Clark County, Nevada. The improvements include: construction of a neighborhood park, trail system and trailhead, tennis complex, day camp and a BMX track/terrain park. Water and sewer lines will be constructed to service the proposed facilities. The project will require shallow groundwater dewatering and discharge. Where possible, shallow sumps and trenches will be excavated adjacent to the improvements to collect groundwater and surface (nuisance) flows, and discharge the flows into sediment settling tanks prior to the water being returned to the Wash. The treated discharge will be directed to one or more of three outfalls located at: 001) the Whitney Wash Channel on the east side of the project area, 002) drop inlet at the intersection of Galleria Drive and Plain Sight Drive, and 003) drop inlet at the intersection of Galleria Drive and Patrick Lane. The treated discharge will be returned to the Wash by either pumping it to the direct discharge location at the Whitney Wash, or by allowing it to gravity flow to one of the stormdrain drop inlets. Discharge conveyed to any of these outfalls will ultimately reach the Pittman Wash, a tributary to the Las Vegas Wash, as it does under existing pre-development conditions. Upon completion of each proposed improvement in the areas below static groundwater elevation, the groundwater extraction operations will cease and the pumping system will be removed.

The proposed NPDES permit is for a period of five years, although the construction project, with requisite dewatering and discharge activities, is expected to be completed in approximately six months. Monitoring

of the discharge is conducted to ensure that surface waters are not degraded as a result of the construction dewatering discharge.

Flow: The facility's total maximum daily discharge from the construction dewatering will be permitted at 1.3 million gallons per day (MGD) (300 gallons per minute per discharge outfall) and the 30-day average discharge will be 0.864 MGD (200 gallons per minute per outfall). The flow rates are based on anticipated dewatering rates and current groundwater elevation information.

Receiving Water Characteristics: The receiving water for the construction dewatering discharge is the Pittman Wash. The Pittman Wash is a minor tributary to the Las Vegas Wash, which is the primary wastewater and stormwater drainage outlet for the Las Vegas Valley and surrounding watershed. The shallow groundwater encountered for the Whitney Mesa Park construction project is representative of Pittman Wash water quality. Settling tanks will be used to filter the water prior to discharge to the Wash. Monitoring of the discharge outfalls will ensure that water quality is not degraded appreciably and that downstream projects and downstream water users are not impacted by the additional activities in the Wash. Water quality standards for the beneficial uses designated in NAC 445A.198, for the Upper Las Vegas Wash, are specified in NAC 445A.199.

Site Groundwater: Within the project area the groundwater elevation is generally quite shallow, approximately 2-4 feet below the existing channel flowline. The local groundwater flow direction is northeast.

Corrective Actions Sites: There are no Bureau of Corrective Actions (BCA) remediation sites within a one-mile radius of the facility.

Well Head and Drinking Water Supply Protection: The facility is within 6000' of a surface water intake. A Wellhead Protection Area (WPA) has not been established for this area.

Proposed Discharge Limits: Specific sampling and monitoring requirements are listed below in Table 1.

Table 1. Discharge Limitations, Sampling and Monitoring Requirements

Parameters	Units	Discharge Limitations		Monitoring Requirements		
		30-Day Average	Daily Maximum	Sampling Locations	Monitoring Frequency	Monitoring Type
Maximum Daily Discharge ¹	gpm	---	300	001, 002, 003	Continuous	Flow meter
30-Day Average Discharge Rate ¹	MGD	0.288	---	001, 002, 003	Continuous	Calculate
Total Maximum Daily Discharge ²	gpm	---	900	Σ (001, 002 + 003)	Continuous	Calculate
Total 30-Day Average Discharge Rate ²	MGD	0.864	---	Σ (001, 002 + 003)	Continuous	Calculate
pH	S.U.	6.5 ≤ pH ≤ 9.0		001, 002, 003	Monthly	Discrete
Profile I ³	mg/l	---	M&R	001, 002, 003	Monthly	Discrete
TPH ⁴	mg/l	---	1.0	001, 002, 003	Monthly	Discrete
VOC ⁴	μg/l	---	M&R	001, 002, 003	Monthly	Discrete
Perchlorate ⁵	μg/l	---	M&R	001, 002, 003	Bi-Weekly	Discrete

NOTES: 001 = Outfall 001, as discharge from pipe enters Whitney Wash; 002 = Outfall 002, as discharge enters drop inlet at Galleria & Plain Sight; 003 = Outfall 003, as discharge enters drop inlet at Galleria & Patrick. Report results of each outfall on three separate DMRs, and report sum of discharges on a fourth DMR form.

1. Monitor continuously, as discharge occurs, the discharge to each outfall. Report quarterly, the maximum daily discharge and 30-day average discharge rates for each outfall. (Rates are based upon discharge to any one outfall.)
2. Report quarterly the sum of all outfalls, the daily maximum and 30-day average discharge rates. (Rates are based upon total discharge to all outfalls.)
3. Sample each outfall monthly and analyze for all Profile I parameters (Anions, Cations, Inorganics, Metals). All metals analyses shall be total recoverable. Report quarterly for each outfall, the daily maximums for each parameter.
4. Sample each outfall monthly and report quarterly for each outfall, the daily maximum concentrations. Report the full range of hydrocarbons, C6-C40, purgeable and extractable, and all VOC parameters, using EPA Methods 8015B and 8260B.
5. Sample each outfall bi-weekly, and report quarterly for each outfall, the 30-day averages and daily maximum perchlorate concentrations. Analyze using EPA Method 314 or equivalent.

gpm: gallons per minute

M&R: Monitor and Report

mg/l: milligrams per liter

Profile I: All parameters on NDEP Profile I list

VOC: Volatile Organic Compounds

MGD: Million gallons per day

S.U.: standard pH units

µg/l: micrograms per liter

TPH: Total Petroleum Hydrocarbons

Rationale for Permit Requirements: The Division has established the monitoring requirements in Table 1 above to ensure that water quality is not degraded as a result of project activities.

Flow: The rationale for the daily maximum and 30-day average discharge rates was explained in the Flow section of this fact sheet. Each outfall is required to be monitored and reported separately, and the sum of all outfalls' discharges is required.

pH: 6.5 - 9.0, standard units. pH is required monitoring per standards stipulated in NAC 445A.199 for the beneficial uses designated in NAC 445A.198. Report for each outfall.

Profile I: M&R. The requirement is to sample monthly and report quarterly. Each outfall is required to be monitored and reported separately.

TPH: 1.0 mg/L. The limit is based on BCA action levels. Sample monthly and report quarterly, for each outfall.

VOC: M&R. Sample monthly and report quarterly, for each outfall.

Perchlorate: M&R. The requirement is to sample quarterly to ensure that nearby groundwater plumes are not being drawn into the dewatering system. There are no water quality standards for perchlorate, but recent data submitted with the application shows groundwater perchlorate concentrations of 15-28 µg/L. The perchlorate sources are upstream of the project area. The proposed project will simply extract and discharge groundwater that would otherwise naturally recharge the Wash. The project dewatering discharges will produce no net increase in perchlorate loading to the Wash.

Schedule of Compliance: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance:

- The Permittee shall achieve compliance with the discharge limitations upon issuance of the permit.
- Prior to the start of dewatering discharge, or by **MM DD, 2011**, whichever comes first, the Permittee shall submit to the Division, for review and approval, an **Operations & Maintenance Manual (O&M)**, for the proposed dewatering and discharge activities. The **O&M** shall include a Dewatering Plan providing dewatering discharge details including discharge routing, methodology and BMPs to be utilized. The **O&M** shall also include a Sampling and Analysis Plan summarizing the monitoring, sampling, analytical, and data reporting procedures for the proposed sampling locations. Before implementing changes to an approved **O&M**, the Permittee shall submit the proposed changes to the Division for review and approval.
- The Permittee shall notify the Division in writing within 14 days of initiating discharge.

Proposed Determination: The Division has made the tentative determination to issue the proposed permit for a period of five (5) years.

Procedures for Public Comment: The Notice of the Division's intent to issue a NPDES permit for a five-year period, authorizing this facility to discharge into the Pittman Wash via sumps and trenches, subject to the conditions contained within the permit, is being sent to the **Las Vegas Review-Journal** for publication. The Notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **September 26, 2011 by 5:00 P.M.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Prepared by: Jeryl R. Gardner, P.E.
Date: August, 2011